PART II

BUILDING STRONG NEIGHBORHOODS

CHAPTER 4: LAND USE

Land use refers to how land is currently used and how it should be used in the future. Population and economic trends help to predict future needs for various land uses. The City of Fort Worth guides land use to ensure that land resources appropriately encourage economic development, promote a variety of housing developments, preserve natural and historic resources, and accommodate transportation routes and public facilities in order to protect and improve Fort Worth's quality of life.

The land use chapter includes a description of existing and projected land uses, goals outlining Fort Worth's preferred development patterns, and planning policies to guide development patterns and the location of specific land uses.

The future land use plan, illustrated by planning sector in Appendix C, is used to guide the location of appropriate places to live, conduct business, and recreate. The City of Fort Worth and private service providers use the land use plan to determine future infrastructure and service needs. Elected and appointed officials, such as the City Council, City Plan Commission, and Zoning Commission, use the land use plan and refer to pertinent policies when making decisions regarding platting, zoning, annexation, budgeting, and major expenditures.

EXISTING CONDITIONS AND TRENDS

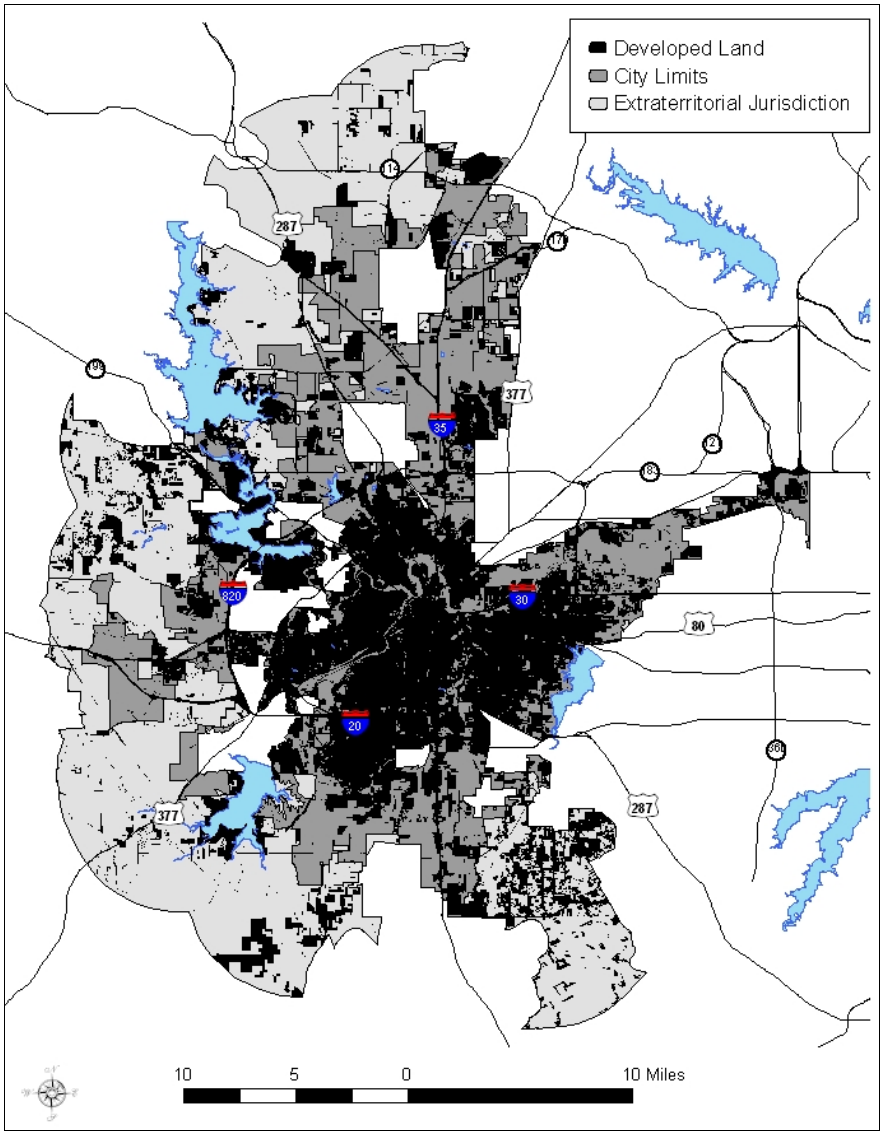
An understanding of Fort Worth's land use and zoning helps to put into perspective the City's development history and how Fort Worth may continue to develop. Definitions of land use categories are included in the Glossary at the end of the Comprehensive Plan.

Current Land Use

Land use data for Fort Worth first became available in 1960 when the City's size was 145 square miles, less than half the size it is today. At that time, 37 percent of the Fort Worth's land was vacant. Today, Fort Worth encompasses 358 square miles, 46 percent of which is vacant. One-third of the undeveloped land is constrained by factors such as steep slopes or floodplain location, and is unable to be developed. Fort Worth's percentage of vacant land, 46 percent, is high compared to other Texas cities: Arlington, 21 percent; Austin, 42 percent; and Dallas, 24 percent. In addition to the City's 358 square miles which includes 15 square miles within limited purpose annexation areas the approximate land area within the extraterritorial jurisdiction (ETJ) is 320 square miles, the majority of which is vacant.

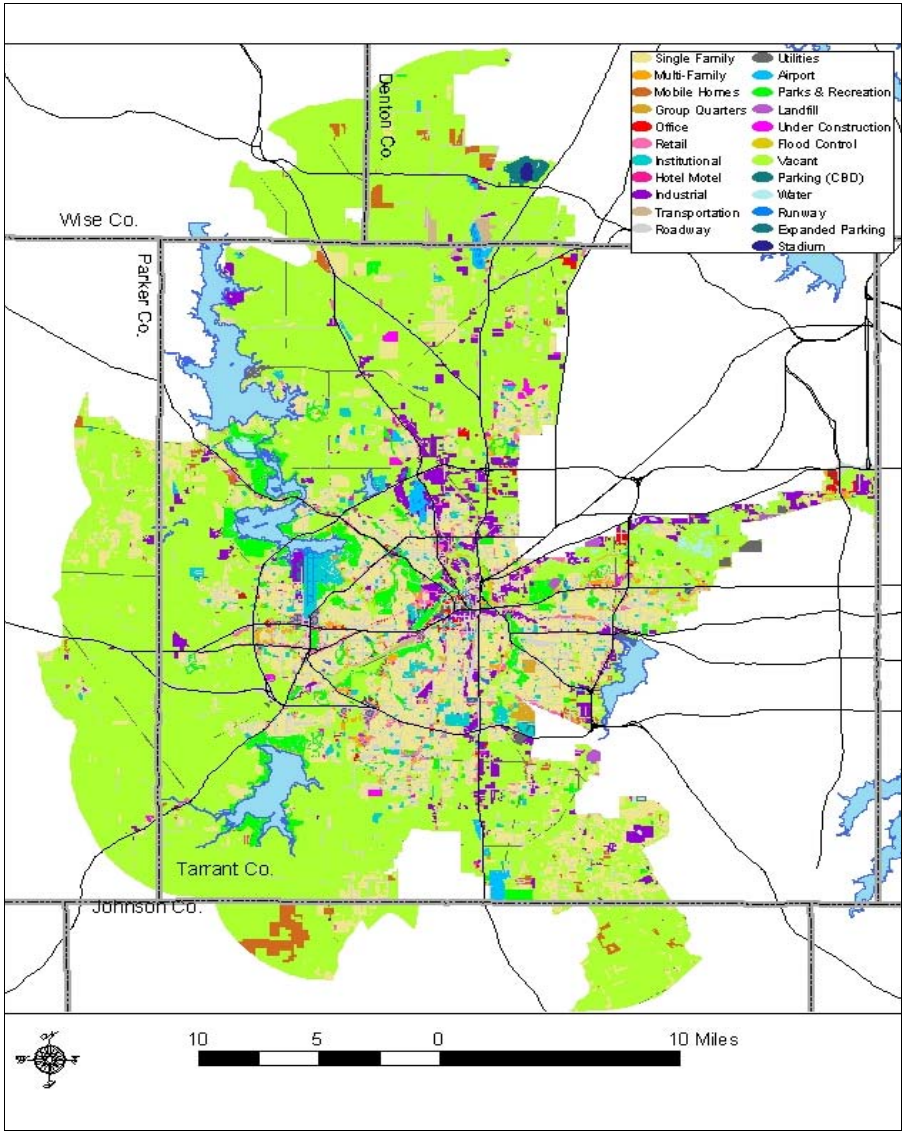
The developed land uses in the City of Fort Worth are; Single-family, Low Density Residential (including duplexes and townhouses), and Manufactured Housing utilize the greatest amount of land area, together totaling 37 percent. This compares to 53 percent in Arlington, 42 percent in Dallas, and 33 percent in Austin. Multifamily uses represent just 2.2 percent of the developed land area (or 1.6 percent of the total land

Developed Land in Fort Worth and Its Extraterritorial Jurisdiction, 2000



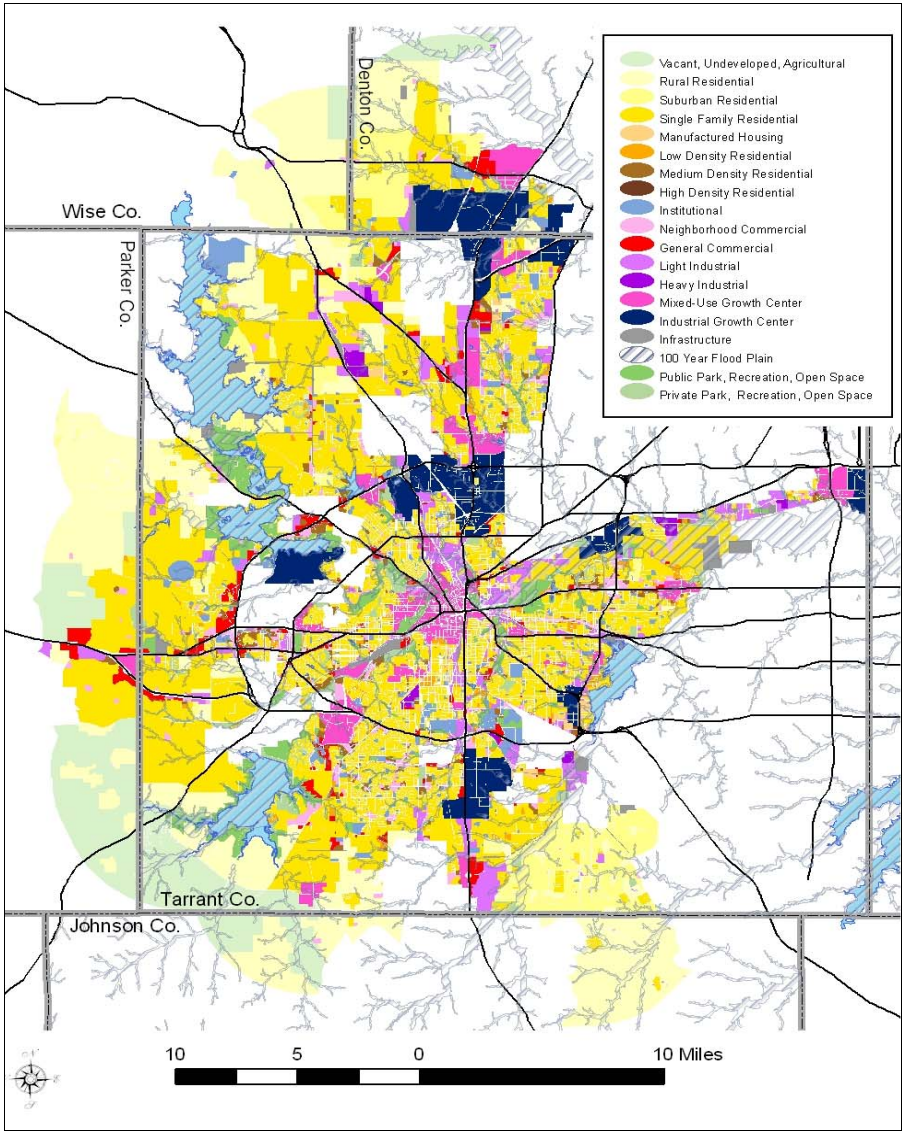
In 2000, 62 percent of the land in Fort Worth and its ETJ was undeveloped. The development pattern is irregular and not contiguous.
(Source: North Central Texas Council of Governments, 2000.)

Existing Land Use
City of Fort Worth and ETJ, 2000



The most prevalent existing land use is single-family. Much of the city and its ETJ is currently undeveloped. *(Source: North Central Texas Council of Governments, 2000.)*

Future Land Use
City of Fort Worth and ETJ, 2026



A comprehensive plan shall not constitute zoning regulations or establish zoning district boundaries.

Land uses are proposed for all land within the current city limits and for most of the land in the ETJ recommended for development over the next 20 years. See Appendix C for individual sector maps at a larger scale. *(Source: Planning Department, 2005.)*

area). This compares to 5.8 percent of developed land uses in Dallas, 5.9 percent in Arlington, and 5.2 percent in Austin.

Fort Worth has a strong industrial base. Industrial land uses amount to 9.6 percent of the developed land in Fort Worth, which compares closely to nine percent in Dallas, but is higher than Arlington and Austin, at five percent each. Fort Worth has a smaller percentage of its developed land area in commercial use, at 7.6 percent, compared to Arlington (11 percent), Dallas (eight percent), and Austin (eight percent). The pie chart to the right depicts the breakdown of land uses in 2000.

Current Zoning

The land within the city limits of Fort Worth is divided into different zones that permit certain land uses and prohibit others. Zoning regulations also include development standards such as those related to building height and setbacks. Although there are 41 separate zoning classifications, they can be grouped into eight major categories. Of the 41 classifications, seven are inactive and four are overlay districts. The largest zoning district category is Single-family and Low Density Residential, representing approximately 51 percent of the total land within the city limits. This compares closely to the 45 percent of developed land that contains single-family and low-density residential uses.

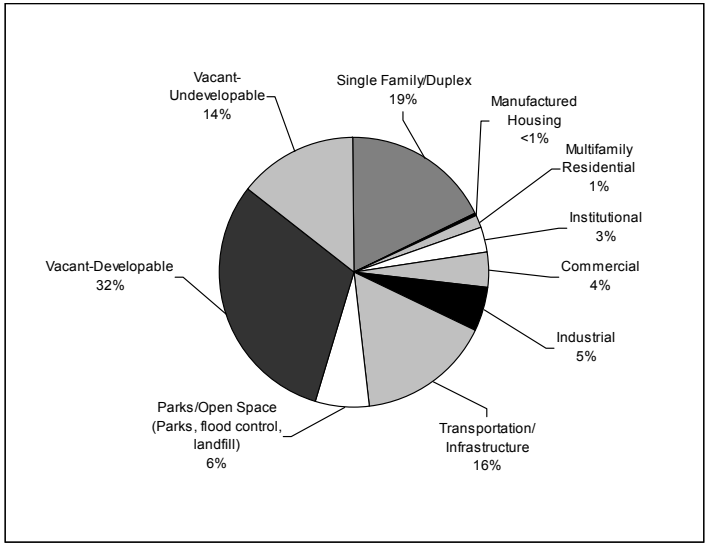
The next largest zoning category, Industrial, makes up approximately 20 percent of the total land area in the city. However, only 12 percent of the developed land within the City is used for industrial purposes. Similarly, 11 percent of the City is zoned Commercial, while only eight percent of developed land is used for commercial purposes. The pie chart to the lower right depicts the breakdown of land area by zoning category.

Projected Land Use

Existing land use trends and population and employment projections are used to project the demand for new land uses. Based on land annexation trends over the last 14 years, it is expected that the city limits will expand by 90 square miles from 358 square miles in 2005 to 448 square miles by 2025, or approximately 4.5 square miles per year. Between 2000 and 2025, the population is expected to grow 50 percent, and the amount of developed land can be expected to increase by the same percentage, from 163 square miles to 245 square miles. Applying a straight line projection, 54 percent of the City's total land area should be developed in the year 2025, compared to only 46 percent in 2000. It should be noted that this straight line projection assumes a more efficient development pattern. Over the past several decades, the increase in developed land has outpaced population growth.

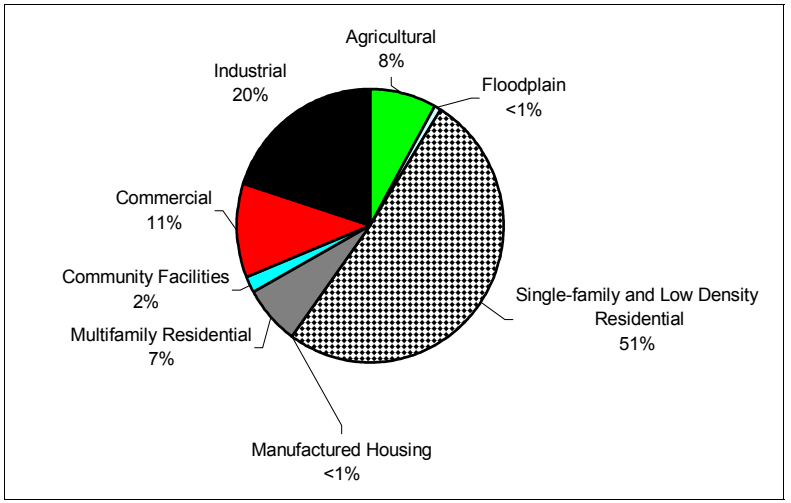
Appendix C contains a future land use map for each of the 16 planning sectors within the city, as well as land use policies applicable to each sector. The land use policies and related maps guide future land use decisions. Zoning, plats, annexations, special exceptions, variances, certificates of appropriateness, design review and other land use decisions will be made after consulting the adopted map and policies.

Existing Land Uses in Fort Worth, 2000



Single-family and duplex land uses constitute 19.4 percent or 61 square miles of Fort Worth's total land area. *(Source: North Central Texas Council of Governments, 2000.)*

Current Zoning in Fort Worth, 2005



Approximately 31 percent of the city, or 107 square miles, is zoned for commercial or industrial uses, yet only 20 percent of developed land is currently used for these purposes. *(Source: Planning Department, 2005.)*

Factors That Influence Land Use

A number of factors influence land use decisions. Some of the most important are discussed below.

Population and Housing Growth – As the population grows, the demand for residential land will increase at an average rate of one acre for every ten new residents. This is an average of approximately four dwelling units per acre for all types of residential uses. Fort Worth may also expect supportive land uses such as neighborhood commercial, institutional, infrastructure, parks/open space, and other uses to grow.

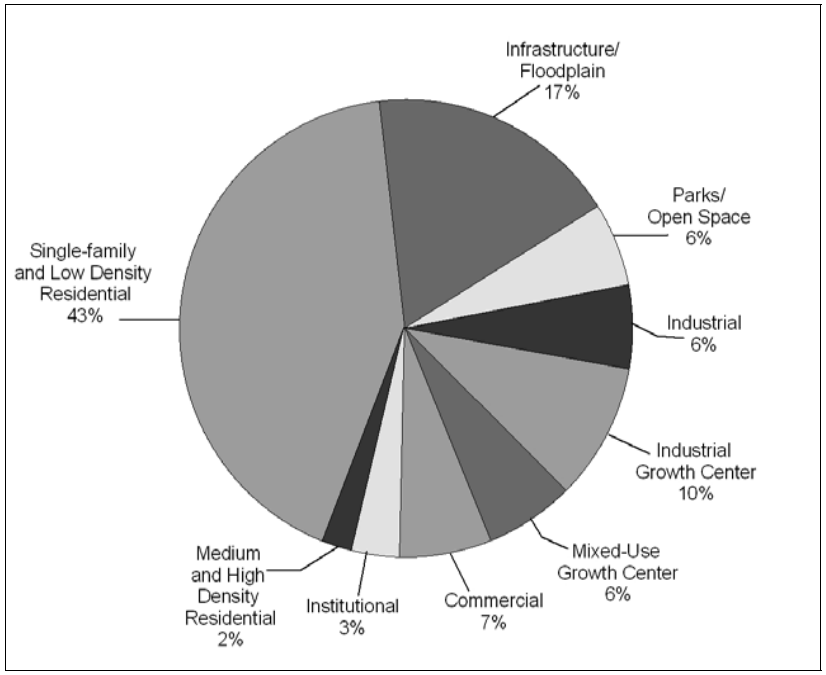
Economic Growth – Due to continued employment and population growth, Fort Worth can expect a significant amount of land to be developed for new businesses and industry. Based on current land use proportions, approximately 6,700 new acres of commercial and industrial land use could be developed by 2026.

Market Demand – Depending on several related variables, including but not restricted to demographics and socio-economic characteristics of the local population, local and regional economic trends, area land prices, and fuel and construction costs, market demand may impact the amount and location of various land uses. The future supply (acres) of any given land use, such as high-end downtown housing or commercial uses in sparsely populated areas of the city, should not exceed any anticipated demand for such a land use in the proposed area. However, forecasted land use designations can be modified in annual updates to more realistically match the needs reflected by the existing market demand of any future point in time. Excessive reliance on current market demand can stymie creativity and availability of options. For example, the multifamily market was an untapped resource until it was tested and found successful in Downtown.

Transportation Access – Land use decisions are largely based on available access to various modes of transportation. Freeways and arterial streets will attract commercial, high density residential, and warehouse/distribution uses. Railroads and rail yards attract industrial uses. Passenger railroads, including light rail, will attract high density residential, commercial, and office space adjacent to stations. Airports discourage residential use, yet will attract light industry, distribution uses, hotels, and conference facilities. On the other hand, transportation facilities sometimes follow land use decisions, particularly when development is rapid. For example, passenger rail lines are often not built until dense development has occurred and sufficient ridership warrants the expense.

Environmental Constraints – The ability to use land will greatly impact the types of land uses developed. In floodplains, buildings must be constructed above the 100-year flood level unless used for recreational purposes. Soils, slope, and depth to rock will continue to be a factor in land use decisions. Noise from railroads, rail yards, freeways, and airports will discourage residential land uses. Odors from wastewater treatment plants and landfills may tend to discourage development, especially downwind of these facilities. Truck traffic from batch plants, mining, and landfills

Future Land Use in Fort Worth, 2026



It is estimated that single-family and low density residential uses will make up 45 percent of the city's land area in 2026. *(Source: Planning Department, 2005.)*

may also deter certain types of development, particularly residential. Gas wells by city ordinance may be located in any zoning district or future land use category. Adjacent development may be impacted by drilling, truck traffic, and the perception of not being secure or hazardous to health, safety and welfare of nearby inhabitants.

Infrastructure Availability – The availability and cost of water, wastewater extension, drainage systems, roads, and communication networks are critical to the timing and density of new land uses. The Master Thoroughfare Plan, for example, determines the location and classification of roadways, which directly impacts the land uses they serve.

Development Regulations – A property's location within or outside the city limits impacts land use. Outside the city limits, land is not subject to land use or building regulations, but subdivision and street standards apply, as they do within the city limits. Within the city limits, land uses are controlled and development is regulated by zoning and building codes. The land use element of the Comprehensive Plan is a guide for how land should be zoned.

Multiple Growth Center Development Pattern

During the planning process for the 2000 Comprehensive Plan, participants expressed a strong preference for a multiple growth center development pattern, as depicted in the diagram to the right. The multiple growth centers concept promotes compact urban land use within designated areas and lower intensities of land use elsewhere in the city.

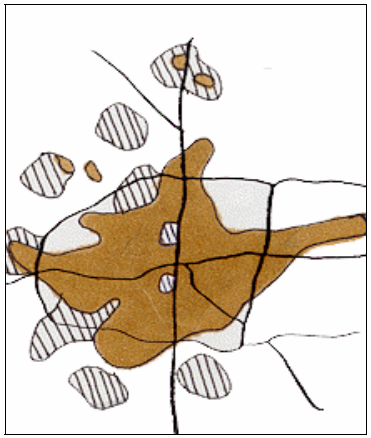
Traditional development practices have emphasized auto-oriented commercial corridors, isolated business parks, and single-use subdivisions. Metroplex residents generally work in one district, live in another, shop in yet another, and travel among the three on major traffic arterials. This pattern increases commuting times and exacerbates both traffic congestion and air quality problems. As an alternative, and in accordance with community preference, the Comprehensive Plan promotes the development of multiple growth centers.

Growth centers are located along highway or rail corridors to facilitate transportation linkages to other growth centers. A network of growth centers can accommodate citywide growth with fewer environmental impacts, less land consumption and traffic generation, and less pollution than a dispersed development pattern. The North Central Texas Council of Governments is also promoting this growth strategy in response to traffic and pollution concerns. The Comprehensive Plan identifies two types of growth centers, mixed-use and industrial. The following general criteria have been developed for each.

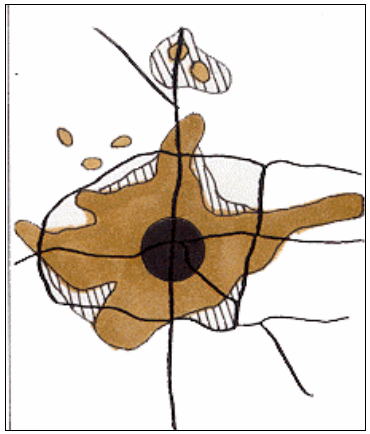
Mixed-Use Growth Centers and Urban Villages

A mixed-use growth center is a highly urbanized place that has many characteristics of a downtown: a concentration of jobs, housing units, schools, parks, and other public facilities, public transportation hubs, pedestrian activity, and a sense of place. Its predominant land uses are residential and commercial. Within a relatively small

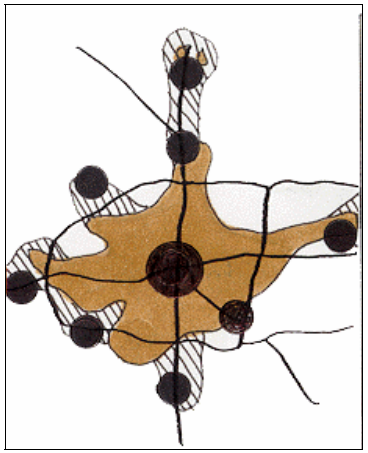
Sample Urban Development Patterns



Dispersed



Compact urban core



Multiple growth centers

The multiple growth center development pattern promotes a relatively high intensity of land use within growth centers and relatively low intensity land use between growth centers. *(Source: Planning Department, 2001.)*

geographic area, different land uses are found side by side or within the same structures. These places tend to be bustling, diverse, and festive.

Mixed-use growth centers differ from commercial corridors in that they are compact (vs. linear), are favorable to pedestrians and public transit (vs. automobiles), have integrated land uses, and have buildings oriented to the street. Growth centers support the concept of sustainable development, which seeks to balance access, mobility, affordability, community cohesion, and environmental quality.

The potential benefits of mixed-use growth centers include the following:

- Economic development,
- Development of multifamily housing at appropriate locations,
- Protection of single-family neighborhoods,
- Efficiency in the provision of public facilities and services,
- Convenience for residents and workers,
- Reduced reliance upon single-occupancy vehicles,
- Protection of the environment,
- A healthier walkable community, and
- Sense of place.

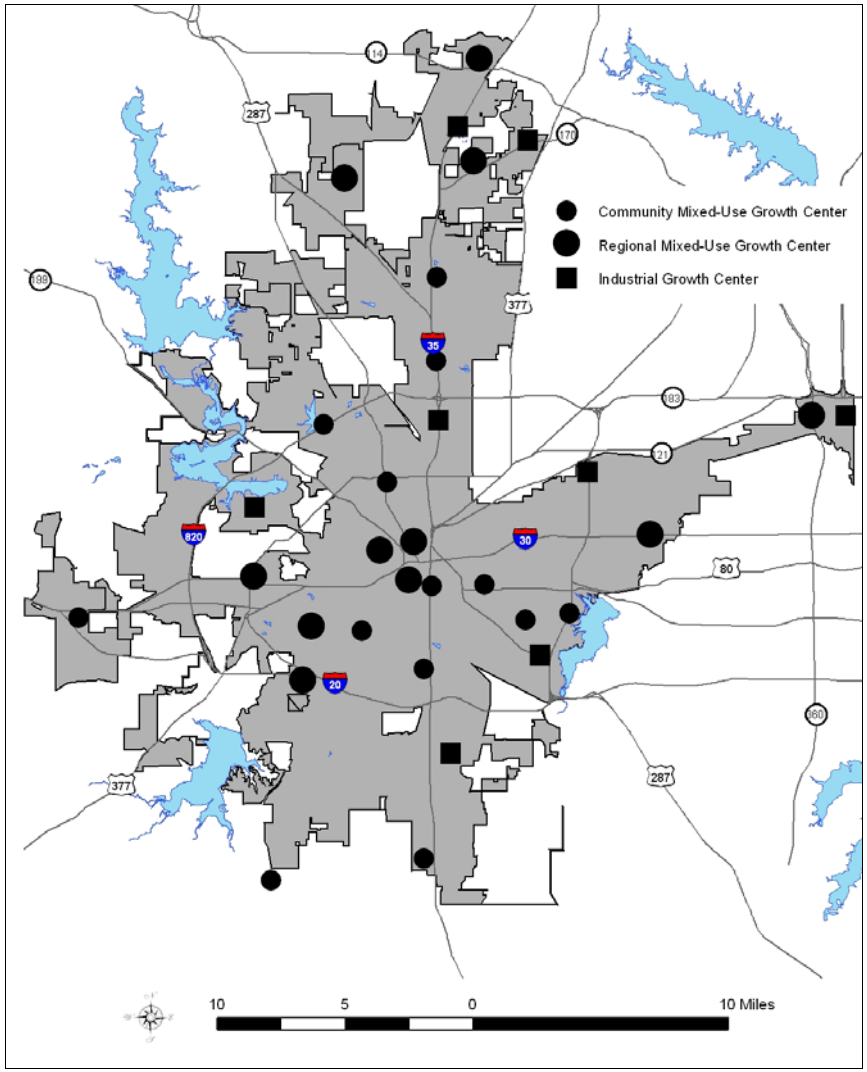
Because the concept and identification of growth centers is relatively new to Fort Worth, general criteria have been developed for their selection. A mixed-use growth center should have three or more of the following characteristics:

- A high concentration of employees — 10,000+ employees per square mile,
- A high concentration of residents — 10,000+ residents per square mile,
- One or more major transportation facilities — an airport, railroad, highway, public transit, arterial roadway,
- Major institution(s) — a university, government facility, or hospital, and
- Major tourist destination(s) — 100,000+ visitors per year.

Some mixed-use growth centers will serve a large region while others primarily serve local residents. Of the 24 mixed-use growth centers, 12 are identified as regional growth centers. For example, Downtown and the Cultural District may draw visitors that drive an hour or more to enjoy the special entertainment and cultural activities found in those areas. The remaining 12 are community growth centers, which will serve approximately 100,000 people and have a service area radius of approximately five miles. The functions and characteristics of the two different growth centers will generally be the same, with variations in the size of their service areas and in the intensity of development.

The intensity of development in the various growth centers should correspond to the activity and character of the surrounding area. For example, Downtown is a much more intense mixed-use growth center than the Stockyards, yet each has an appropriate mixture of desirable uses. Specific economic development and urban design strategies should be integrated to promote and guide appropriate development

Multiple Growth Centers



There are 32 designated growth centers-24 mixed-use and eight industrial. Mixed-use growth centers have a high concentration of jobs and housing, access to public transit and public facilities, pedestrian activity, and a sense of place. Industrial growth centers are similar, but do not have a concentration of housing. *(Source: Planning Department, 2005.)*

within each growth center. With proper guidelines established, each growth center should achieve the critical mass of employment necessary to support a variety of additional uses.

The adjacent table lists zoning classifications that tend to be appropriate for property within regional and community mixed-use growth centers. Mixed-use, multifamily, and commercial zoning classifications are generally most desirable, while townhouse, duplex, and similar residential zoning classifications are usually acceptable in appropriate locations. Most single-family zoning districts, however, are not appropriate within mixed-use growth centers. While mixed-use growth centers may contain some single-family dwellings, this low-density land use should not predominate in those places where the City seeks to generate a high level of economic activity. Single-family residential, (less than four units per acre), low density residential, (less than nine units per acre) and neighborhood commercial uses are encouraged in the areas located between growth centers. Industrial zoning districts are also inappropriate within mixed-use growth centers because they permit many land uses that tend to be incompatible with a multifamily residential environment. Similarly, agricultural zoning is generally inappropriate as a permanent classification for property within mixed-use growth centers, but may be acceptable as an interim classification for newly annexed property.

Compact mixed-use development is also encouraged in certain areas targeted for redevelopment along commercial corridors. These areas are known as urban villages and are described in Chapter 10: Economic Development. Urban villages that are outside of growth centers are depicted as Neighborhood Commercial on the future land use maps in Appendix C. The urban village development program promotes mixed-use zoning in designated villages.

Industrial Growth Centers

Intense industrial uses should be located within industrial growth centers that incorporate other compatible uses and are well integrated into the transportation network. An industrial growth center will primarily consist of industrial and commercial uses, with a high concentration of jobs, mostly industrial in nature. Other related and supporting uses include office space and services. Unlike mixed-use growth centers, residential uses are generally discouraged within industrial growth centers. Criteria for designation include the following:

- A high concentration of employees — 10,000+ employees per square mile, and
- The location of one or more major transportation facilities, such as an airport, railroad, highway, public transit station, and/or arterial roadway.

Based on these criteria, eight industrial growth centers have been designated, and are shown on the map on the previous page.

Land Use and Zoning Conformance

Current zoning of developed and vacant land in Fort Worth does not consistently conform to the proposed land uses in Appendix C. Parts of the city were first zoned

Appropriate Zoning Classifications For Mixed-Use Growth Centers In Fort Worth

ZONING CLASSIFICATIONS	USUALLY ACCEPTABLE	MOST DESIRABLE	
		COMMUNITY	REGIONAL
AG			
CF, PD	✓		
A-5, A-7.5, A-10, A-21, A-43, A-2.5A			
AR, B, R1, R2	✓		
CR, C, D		✓	✓
ER, E		✓	✓
MU-1 and MU-1G		✓	✓
FR, F, G, H*			✓
MU-2 and MU-2G			✓
I, J, K			

*H is allowed only in Downtown mixed-use growth center.

Mixed-use, multifamily, and commercial zoning classifications are most desirable in mixed-use growth centers. High Intensity Mixed-Use, light and heavy industrial zoning classifications are appropriate in Industrial Growth Centers. (*Source: Planning Department, 2005.)*

over 60 years ago, with few major changes since. Many areas were annexed during certain periods of rapid growth, and subsequently required new City zoning. The classifications for many of these annexed districts have changed over the years, often to allow more intense land uses. However, these rezonings did not always stimulate new development. As a result, many neighborhoods have zoning classifications that do not conform to current land uses.

To have zoning conform strictly to the proposed land uses in Appendix C, approximately 29 percent of the land within the city limits would have to be rezoned. Approximately one half of this area is currently undeveloped. The other half largely represents districts in which the existing zoning does not conform to the existing low-intensity land uses. The map on the this page shows the individual sectors and the extent to which zoning does not conform to the desired land uses. The percentage of the area within a sector that does not conform to the land use plan ranges from seven percent in the Far North sector to 45 percent in the Northside sector**.**

To guide growth and development effectively, and efficiently, the City's zoning regulations and districts should generally conform to the adopted Comprehensive Plan. Because of the number of zoning districts that do not currently conform to the plan and/or existing uses, the City should initiate zoning changes. A process has been established to prioritize zoning changes and to ensure a desired consensus. The City involved property owners, neighborhood organizations, and other interested parties in developing the process by which the City initiates such zoning changes. More information may be found in Chapter 22: Development Regulations.

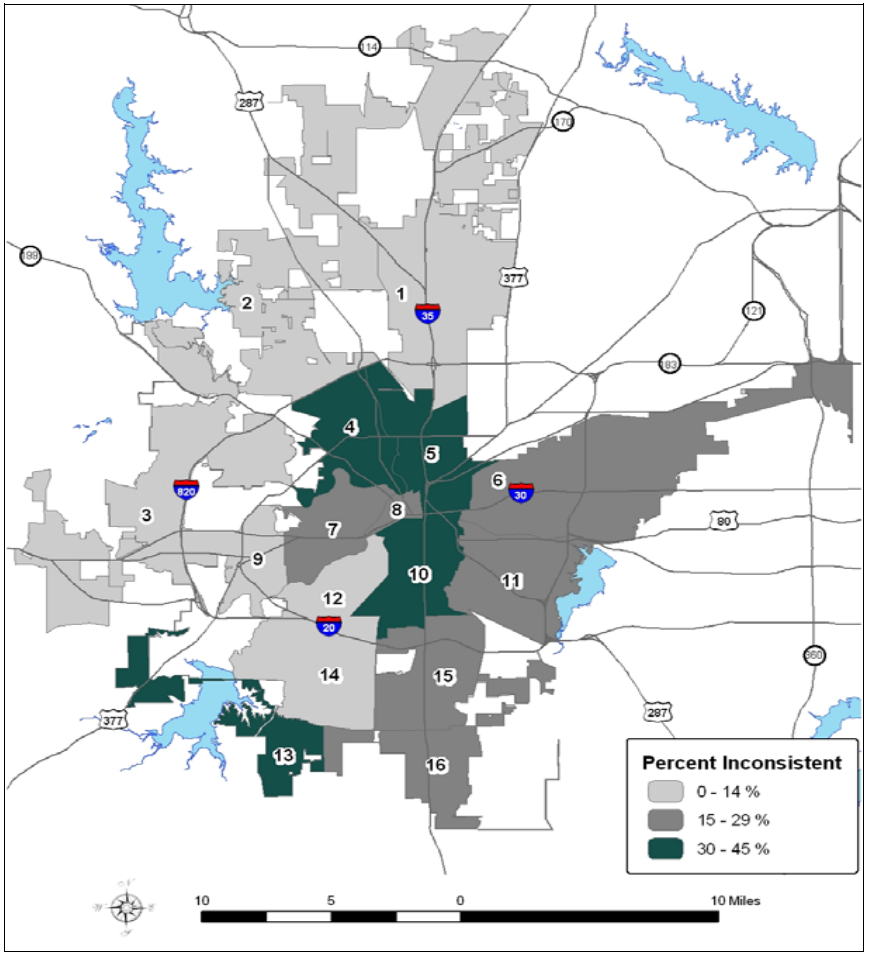
GOALS

- Promote a multiple growth center development pattern by encouraging higher intensity residential and commercial uses within mixed-use growth centers, and higher intensity industrial and commercial uses within industrial growth centers.
- Ensure that the City's zoning regulations and districts generally conform to the adopted Comprehensive Plan.
- Promote orderly growth in developing areas.
- Provide for interconnectivity of streets and trails to reduce vehicle trips on arterial streets, increase efficiency, reduce air pollution, distribute traffic, improve access to public places, and improve efficiency in providing services and deliveries.

POLICIES AND STRATEGIES

The following are current and recommended policies and strategies prescribed for development and redevelopment of the City. They should be used as a guide for evaluating and proposing land development projects.

Percentage of Incorporated Land Area within Each Sector for which Zoning is Inconsistent with Proposed Future Land Use, 2005



	30% or greater	
4	Northside	45%
5	Northeast	30%
10	Southside	33%
11	Southeast	30%
13	Far Southwest	40%

	15% to 29%	
6	Eastside	18%
7	Arlington Heights	15%
8	Downtown	20%
15	Sycamore	23%
16	Far South	27%

	0% to 14%	
1	Far North	7%
2	Far Northwest	10%
3	Far West	14%
9	Western Hills/Ridglea	9%
12	TCU/Westcliff	13%
14	Wedgwood	10%

(Source: Planning Department, 2005.)

Policies

- To promote orderly growth in developing areas, the City should generally support single-family residential development with lot sizes that are compatible with surrounding single-family lot sizes. Furthermore, the City should generally support the creation of small-lot single-family zoning districts (i.e. AR and A-5) in proximity to mixed-use growth centers, where the City seeks to concentrate employment and public services, and support the creation of larger-lot single-family residential zoning districts (i.e. A-7.5 through A-2.5A) in more remote locations.
- Encourage new development adjacent to developed or platted areas so as to utilize existing infrastructure and services.
- Encourage appropriate development and redevelopment within central city commercial districts and neighborhoods.
- Encourage mixed-use projects in mixed-use growth centers and urban villages.
- Promote appropriate in-fill development of vacant lots and contaminated sites (brownfields) within developed areas, particularly in the central city.
- Separate incompatible land uses with buffers or transitional uses. Some land uses have attributes such as height, proportion, scale, operational characteristics, traffic generated, or appearance that may not be compatible with the attributes of other uses.
- Encourage parks and open space along floodplains and water bodies.
- Locate public parks within easy access of residents (less than one-half mile).
- Encourage the provision of open space within new developments, with the goal of linking open spaces with adjoining subdivisions.
- Separate manufactured housing into single parks or subdivisions buffered and separated from traditional single-family residential development.
- Locate single-family homes adjacent to local or collector streets.
- Locate multifamily units adjacent to collector or arterial streets.
- Locate commercial and institutional uses adjacent to arterial streets, preferably at the intersections of other arterials and highways.
- Locate large industrial uses along rail lines, highways, or airports within industrial growth centers and other appropriate locations.
- Uses that may be detrimental to health, safety, and welfare (such as hazardous materials, airports, mining, landfills, gun ranges, and manufacturing of certain materials) should continue to be treated on a case by case basis before approval.
- Preserve and protect residential neighborhoods from incompatible land uses, cut-through traffic, disinvestments, encroachment, speculation, demolition, neglect, and other negative forces.
- Discourage location of industrial uses adjacent to residential districts.
- Adopt a sustainable development policy that promotes the following: 1) Land use and transportation practices that promote economic development while using limited resources in an efficient manner; 2) Transportation decision-making based on land use, traffic congestion concerns, vehicle miles traveled, and the viability of alternative transportation modes; and 3) Balance among accessibility, affordability, mobility, community cohesion, and environmental quality. (For

Mixed-Use Growth Centers
Regional
Texas Motor Speedway
Alliance Gateway West
Nance Ranch*
Centreport
Eastchase
Downtown
Cultural District
Medical District
Ridgmar
Walsh Ranch*
Clear Fork
Hulen / Cityview
Community
Alliance Town Center*
Fossil Creek
Marine Creek*
Stockyards
Near Southeast*
Polytechnic / Texas Wesleyan
Miller / Berry*
Texas Christian University
Loop 820 East / Lake Arlington
La Gran Plaza
SH 121 / FM 1187*
Spinks / Huguley
Industrial Growth Centers
Alliance Airport
Alliance Gateway East
Meacham Airport
NAS-JRB / Lockheed-Martin
Carter Industrial Park
Loop 820 East / Lake Arlington
Riverbend
Centreport

Of the 24 mixed-use growth centers, 12 are designated as regional and primarily contain uses that serve both Fort Worth and the surrounding region. The 12 community mixed-use growth centers primarily serve the surrounding neighborhoods within Fort Worth. The eight industrial growth centers are considered regional, and two are located in the area of the Alliance Airport.

* Indicates growth centers that do not currently meet the criteria, but have the potential to do so.

(Source: Planning Department, 2004.)

more information, see Chapter 11: Transportation and Chapter 18: Environmental Quality.)

- Link growth centers with major thoroughfares, public transportation, trails, and linear parks.
- Accommodate higher density residential and mixed uses in areas designated as commercial on the future land use maps.
- Encourage Low Density Residential as a transitional use between Single-family Residential and high density uses.
- Preserve the character of rural and suburban residential neighborhoods.
- Promote locating multifamily units within walking distance of public transportation, employment, recreation, and/or shopping to increase accessibility and decrease vehicular traffic generation.
- Do not locate schools or residential uses in areas adjacent to airports having a noise level of 65 or more decibels DNL (average level day or night).
- Support zoning changes that reduce the amount of vacant land zoned for multifamily residential development beyond designated growth centers and urban villages.
- Shelters for the indigent, needy, homeless or transient persons may generally be appropriate in general commercial and light industrial areas and in regional mixed-use growth centers. Shelters are not appropriate in industrial growth centers and heavy industrial areas.
- Ensure that projects that support the growth center concept are considered in future Capital Improvement Programs.

Strategies

- Promote traditional neighborhood**,** or pedestrian-oriented, development, which encourages human interaction, walking, bicycling, mixed uses, slower traffic, public places, and attractive streetscapes. Traditional neighborhood developments adopt many of the same characteristics of older neighborhoods and towns, such as a grid street pattern, mixed land uses, inconspicuous parking facilities, neighborhood parks, public buildings, and multifamily homes, all within walking distance of most residents.
- Promote transit-oriented development, which encourages compact urban development adjacent to transit stops and interchanges. Mixed uses in a single building, minimal setbacks, and taller structures help achieve the higher densities necessary to support transit. Parking facilities, retail businesses, and services for commuters should be located close to transit stops.
- Improve the design, function, and appearance of commercial corridors by addressing traffic safety issues, excess parking, lighting, landscaping, outdoor storage, refuse containers, the amount and size of advertising, and related issues.
- Encourage single-family and low-density residential development and open space beyond growth centers.
- Encourage new development in character with the existing neighborhood scale, architecture, and platting pattern.
- Encourage location and design of schools that are accessible and compatible with

Land Use and Zoning Classifications

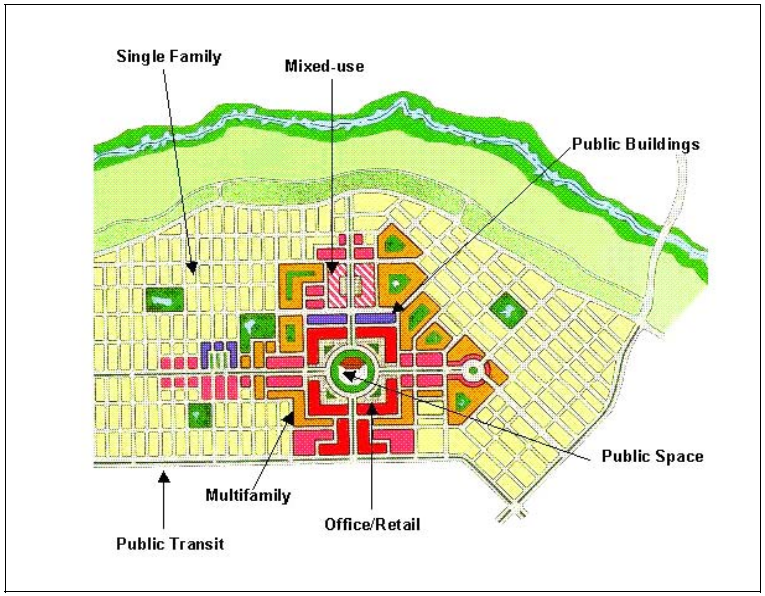
LAND USE	DEFINITION	ZONING
SPECIAL		
Vacant, Agricultural	Vacant, agriculture	AG
Rivers, Lakes, Streams, 100 Year Flood Plain	Water features, 100-year flood plain	Not applicable
Infrastructure	Roads, railroads, airports, utilities	Not applicable
Parks, Recreation, Open Space	Public or private recreation, or passive land	
RESIDENTIAL		
Rural Residential	1+ acre single-family	A-43, A-2.5A
Suburban Residential	1/2+ acre single-family	A-21
Single-family Residential	3500+ sq. ft. lot single-family	AR, A-5, A-7.5, A-10
Manufactured Housing	Manufactured single-family parks	MH
Low Density Residential	2500+ sq. ft. lot single-family, two family, patio homes, townhouses, cluster housing	B, R-1, R-2
Medium Density Residential	<24 units/acre multifamily	CR, C, D
High Density Residential	>24 units/acre multifamily, mixed-use multifamily in growth centers	MU-1, MU-1G, PD
INSTITUTIONAL		
Institutional	Schools, churches, government, human services, utilities, community centers, day care	CF, PD
COMMERCIAL		
Neighborhood Commercial	Retail, services, offices and mixed uses serving daily needs	All Residential, ER, E, MU-1, MU-1G, PD
General Commercial	Retail, services, offices, entertainment, mixed uses serving occasional needs	All Residential, FR, F, G, MU-1, MU-1G, MU-2, MU-2G PD
Mixed-Use Growth Center	Retail, services, offices, entertainment, mixed uses, and multifamily residential	AR, B, R-1, R-2, CR, C, D, all Commercial, MU-1, MU-1G, MU-2, MU-2G
INDUSTRIAL		
Light Industrial	Warehousing, transportation, light assembly, outside storage	All Commercial, MU-2, MU-2G, I, PD
Heavy Industrial	Heavy manufacturing, outside storage	Commercial & Industrial
Industrial Growth Center	Industrial and commercial uses serving a large region	Commercial & Industrial
OTHER		
Nuisance and Special Uses	Bed & breakfast, aviation, mining, refining, towers, landfill, batch plant	Special Exception, PD

Land uses are defined and categorized with the appropriate zoning classification. Fort Worth has 41 zoning classifications, which separate incompatible land uses. *(Source: Planning Department, 2005.)*

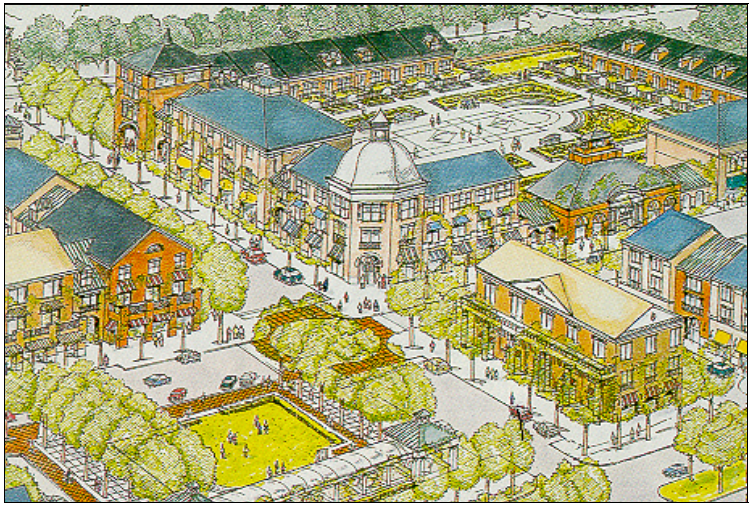
the surrounding neighborhoods.

- Locate elementary and middle schools on collector streets.
- Locate high schools on arterial streets.
- To the extent possible, locate elementary schools, parks, and neighborhood commercial uses within walking distance of most homes.
- Identify institutional uses (schools, churches, etc.) of five acres or more on the future land use maps.
- Utilize traffic impact analysis to determine the transportation system's ability to serve proposed land uses.
- Promote measures to ensure that residential developments, whether single-family or multifamily, large lot or small lot, are compatible in scale to abutting residential developments. A significant increase in units per acre or reduction in lot size should be discouraged for new development immediately adjacent to existing development or platted and zoned property.
- Promote estate type developments and agricultural uses on land designated as agricultural.
- Maximize area of permeable surfaces in developments to reduce stormwater run-off.
- Encourage floodplains as a boundary between incompatible land uses.
- Promote use of ground cover in developments to reduce erosion and sedimentation of rivers, lakes, and streams.
- Leave floodplains in their natural state to improve water quality and minimize flooding.
- Acquire adequate rights-of-way for future improvements to various modes of transportation (sidewalks, trails, bicycle routes, private vehicles, emergency vehicles, and public transportation, including rail), through dedication and donation.
- Encourage infill development of compatible, single-family homes in existing neighborhoods to preserve and protect residential neighborhoods.
- Encourage locating multiple-unit residential structures at corner lots.
- Encourage shared driveways, reciprocal access, easements, and parking among adjacent businesses to reduce traffic impacts.
- Encourage screening and reduction, and/or redirection of objectionable characteristics of commercial uses adjacent to residential areas. These attributes may be noise, glare, signs, parking areas, loading docks, and refuse collection.

Mixed-Use Growth Centers and Urban Villages



This diagram depicts a hypothetical mixed-use growth center, which is oriented to public transit, has mixed uses, higher density development, public spaces, and is surrounded by single-family development. *(Source: Planning Department, 2000.)*



An artist's rendering of an urban village, emphasizing multiple story structures, public spaces, wide sidewalks, and narrow tree-lined streets. *(Source: Urban Land Institute, 1999.)*